

REMARKS

Applicant would like to thank the Examiner for the Notice of Allowance mailed on October 15, 2010. The Specification is amended above to correct a minor typographical error. Applicant respectfully requests entry of this amendment after allowance and submits that no new matter has been added.

Exhibit A, submitted herewith, is a copy of page 1 of the German-language Specification. Applicant respectfully draws the attention of the Examiner to the document cited in line 8. The document is correctly cited as WO 01/73245.

In contrast, Exhibit B, submitted herewith, is a copy of page 1 of the English translation of the Specification. Applicant respectfully submits that, in the corresponding paragraph, the same reference is incorrectly cited as WO 01/73425.

Finally, Exhibit C, submitted herewith, is a copy of an information disclosure statement filed on April 27, 2006 and considered by Examiner Bryan Eppes on May 11, 2009. Applicant respectfully submits that, on line B1, the reference in question is correctly cited as WO 01/73245.

Applicant respectfully submits that the enclosed amendment merely corrects a typographical error and does not introduce new matter. Thus, Applicant respectfully requests entry of this amendment after allowance.

If it is determined that a telephone conference would expedite the prosecution of this application, the Examiner is invited to telephone the undersigned at the number given below.

In the event the U.S. Patent and Trademark Office determines that an extension is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 23-2426 referencing docket no. 46845-P049WOUS.

Dated: November 5, 2010

Respectfully submitted,

Electronic signature: /Samuel A. Udovich/
Samuel A. Udovich
Registration No.: 59,951
WINSTEAD PC
P.O. Box 50784
Dallas, Texas 75201
(214) 745-5400
Attorneys For Applicant

Pneumatische Flächenstruktur

Die vorliegende Erfindung betrifft ein pneumatisches Plattenelement nach dem Oberbegriff des Patentanspruches 1.

5 Pneumatische Bauelemente oder Träger, bestehend aus einem aufblasbaren Hohlkörper sowie getrennten Elementen zur Aufnahme von Druck- und Zugkräften, sind bekannt. Den nächsten Stand der Technik repräsentiert WO 01/73245 (D1).

Der druckbeaufschlagte Hohlkörper dient in D1 in erster Linie 10 dazu, das Druckelement zu stabilisieren und es am Ausknicken zu hindern. Dazu wird das Druckelement über einen Teil oder seine volle Länge mit der Membran des Hohlkörpers kraftschlüssig verbunden.

Ausserdem wird durch den Hohlkörper die Höhe der Trägerelemente definiert, und ferner werden die Zug- und Druckelemente 15 räumlich voneinander getrennt. Die im Dokument D1 offenbarte Konstruktion erlaubt die Fertigung sehr leichter und dennoch steifer und tragfähiger pneumatischer Strukturen. Trotzdem weist das obengenannte pneumatische Bauelement einige Nach- 20 teile auf. Die Zugkräfte in der Membran des Hohlkörpers können im Bereich der Verbindung Membran-Druckelement bezüglich Reissfestigkeit hohe Anforderungen an diese Verbindung stellen. Zudem wird die konstruktive Ausbildung dieser Verbindung sehr aufwändig und dadurch auch teuer. Die möglichen Hohlkörperquerschnitte der Bauelemente beschränken sich im Wesentlichen auf Kreise. Beim in D1 offenbarten Trägerelement handelt es sich im Wesentlichen um eine eindimensionale Tragstruktur. Für grosse Flächen abdeckende Dachkonstruktionen, also im Wesentlichen zweidimensionale Tragstrukturen, ist eine zusätz- 25 liche, zwischen oder über Trägerelemente gespannte, Dachmembran nötig. Weiter ist die Membranfläche des Hohlkörpers gross im Vergleich zur durch ihn bedeckten Fläche (Für kreisförmige Querschnitte gilt: Umfang/Durchmesser=Pi, also ca. 3.14 m² Membran pro m² bedeckter Fläche), was sich wiederum 30 35 in relativ hohen Kosten niederschlägt.

Die Aufgabe der vorliegenden Erfindung besteht darin, ein pneumatisches Tragstrukturelement zu schaffen, welches die oben erwähnten Nachteile der bekannten Konstruktionen elimi-

EXHIBIT

A

DESCRIPTION

The present invention relates to a pneumatic plate element as recited in the preamble of claim 1.

Pneumatic components or supports, consisting of an inflatable hollow body and separate elements for absorbing compression and tensile forces, are known. The most closely related description of the art is represented in WO 01/73425 (D1).

In D1, the hollow body that is subjected to pressure loading serves primarily to stabilize the pressure element and to prevent it from buckling. To this end, the pressure element is attached non-positively to the membrane of the hollow body over some or all of its length.

In addition, the height of the support elements is defined by the hollow body, and the tensile and compressive elements are also located separately from each other. The design disclosed in document D1 enables very light but rigid and pneumatic structures to be produced that are capable of bearing considerable loads. However, the pneumatic element described in the preceding has a number of drawbacks. The tensile forces in the membrane of the hollow body may exert high stresses on the area of the attachment between the membrane and the pressure element with regard to tear strength. Moreover, the structural design of this attachment is very complex and therefore very expensive. The hollow body cross sections of the components that are possible are essentially limited to circles. The support element disclosed in D1 is essentially a one-dimensional support structure. For roof structures

EXHIBIT

B

10/577583
IAP12 Rec'd PCT/PTO 27 APR 2006

IN LIEU OF PTO-SB/08.

Substitute for form 1449A/B/PTO				Complete If Known	
				Application Number	Not Yet Assigned
				Filing Date	Concurrently Herewith
				First Named Inventor	Mauro Pedretti
				Art Unit	N/A
				Examiner Name	Not Yet Assigned
Sheet	1	of	1	Attorney Docket Number	27793-00112USPX

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	
		Number-Kind Code ² (if known)			
	A1*	US-3,145,853	08-25-1964	Langenberg	
	A2*	US-4,676,032	06-30-1987	Jutras	

FOREIGN PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	T ³
		Country Code ⁴ -Number ⁴ -Kind Code ⁵ (if known)			
	B1	WO-0173245	10-04-2001	Pedretti	✓
	B2	DE-101 42 108	05-28-2003	Foiltec Verarbeitung von Folie	✓

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * CITE NO.: Those application(s) which are marked with an single asterisk (*) next to the Cite No. are not supplied (under 37 CFR 1.98(a)(2)(iii)) because that application was filed after June 30, 2003 or is available in the IFW. ¹ Applicant's unique citation designation number (optional). ² See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. ¹	Include name of the author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹Applicant's unique citation designation number (optional). ²Applicant is to place a check mark here if English language Translation is attached.

EXHIBIT

C

Examiner Signature	/Bryan Eppes/	Date Considered	05/11/2009
--------------------	---------------	-----------------	------------

DALLAS2 1153673v1 27793-00112USPX

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /B.E./